Inside EPA: EPA Scales Back Scope of Fracking Study, Highlights Data Limitations

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Fracking study is looking at risks from produced water and discharges to surface. This may affect the 435 FAQ in strange ways, behind the scenes. Take a look at the progress report. There is a link in the article

EPA Scales Back Scope Of Fracking Study, Highlights Data Limitations

Posted: December 21, 2012

EPA has scaled back some aspects of its massive study on potential drinking water impacts associated with hydraulic fracturing, dropping plans to assess possible adverse effects of interactions between fracking fluids and naturally occurring materials in subsurface shale plays and conducting toxicity testing of fracking chemicals.

The agency is also pointing to limitations on some of the data it had planned to assess as part of the study, including difficulty in pinpointing locations in the country where large scale water withdrawals and wastewater treatment processes could impact environmental justice communities.

However, while the agency has made several minor changes slightly narrowing the parameters of its research efforts, one industry source notes that in other respects, "the study continues to expand beyond issues that are fracturing."

For example, the source says that a sizable part of the planned analysis appears to be devoted to analyzing risks from produced water, or wastewater generated from the extraction process and often containing high levels of brine, although produced water results from all forms of oil and gas drilling and therefore is not unique to fracking. "A significant portion of this study seems to be directed toward assessing the management of produced water using the tenuous argument that fracturing allows the development of the resource," that source says.

The agency Dec. 21 released a report, "Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources: Progress Report," which provides an interim update on its two-year research effort aimed at assessing risks of fracking from various phases of the water cycle.

EPA's Office of Research and Development and Office of Water jointly launched the study last year, spurred by a request in the agency's 2010 appropriations bill that the agency examine the possible adverse effects of fracking on drinking water. The study consists of retrospective and prospective case studies aimed at examining actual fracking operations for potential impacts, literature reviews, toxicity assessments and scenario evaluations for the water lifecycle of fracking.

Fracking critics hope the study, slated for completion in 2014, will conclude that the controversial process endangers drinking water, lending support to legislative efforts to strictly regulate the process. But industry and congressional Republicans have raised concerns about EPA's methodology for conducting the research, such as how the agency plans to ensure that technological advancements in the field of fracking are accurately reflected in the study.

In the 278-page report, EPA avoids drawing any conclusions about potential impacts to drinking water supplies from fracking. But the agency outlines several changes it has made in its approach from its final November 2011 study plan.

Those changes include dropping one planned prospective case study in Louisiana's Haynesville Shale due to scheduling conflicts, opting not to conduct toxicological screening of fracking chemicals, and eliminating research questions aimed at assessing how fracking chemicals react once injected into subsurface shale formations.

The agency acknowledges that it likely will not have any prospective case study results in time to meet its 2014 target, and expects to release findings after its 2014 final report.

Further, while EPA as part of the study is compiling chemical, physical and toxicological profiles of common fracking chemicals, it will not conduct high-throughput screening analysis of these chemicals using its computational toxicology program, as outlined in the study plan. The change reflects suggestions made by EPA's Science Advisory Board panel when it reviewed the draft study plan last year, although some chartered SAB members argued that the toxicity testing was key to publishing health research and should be part of the study.

Evaluating Toxicity Data

EPA says in the progress report that while it will not conduct the high throughput screening assays "at this time," it "will continue efforts to identify, evaluate, and prioritize existing toxicity data."

The agency also is withdrawing two research questions from its analysis, given that the Department of Energy is already conducting its own study of whether fracking chemicals interact within various rock formations, the progress report says. "The EPA continues to believe in the importance of research to address questions associated with this project, but has decided to rely upon work being conducted by another federal agency," the agency says.

EPA is withdrawing the questions "How might hydraulic fracturing fluids change the fate and transport of substances in the subsurface though geochemical interactions?" and "What are the chemical, physical, and toxicological properties of substances in the subsurface that may be released by hydraulic fracturing operations?"

And EPA is highlighting some data limitations, such as difficulty in identifying environmental justice communities impacted by high volume water withdrawals and inadequate treatment of fracking wastewater, potential under-reporting of spill incidents at fracking sites and variations in state reporting requirements. "This makes it difficult to categorize reported spills as hydraulic

fracturing-related and to comprehensively identify the causes, chemical identity, and volumes of hydraulic fracturing-related spills," EPA says. The agency plans to host the first of a series of public workshops on the study on Jan. 8, 2013. -- *Bridget DiCosmo* (bdicosmo@iwpnews.com This e-mail address is being protected from spambots. You need JavaScript enabled to view it)

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